

Pregnant and breastfeeding women need iodine supplements

By Robin Mackar

Women of childbearing years, especially those who are pregnant or breastfeeding, should take iodine supplements, according to new guidance by the American Academy of Pediatrics (AAP). (<http://www.aap.org/en-us/Pages/Default.aspx>)

"Many pregnant and breastfeeding women in the United States are not getting adequate supplies of iodine," said Walter Rogan, M.D., head of the NIEHS Pediatric Epidemiology Group and lead author of the policy statement, which appears in the June issue of the journal Pediatrics. "Iodine produces thyroid hormone, which is critical for healthy brain development in children," he said.

AAP recommendations

The new policy statement, "Iodine Deficiency, Pollutant Chemicals, and the Thyroid: New Information on an Old Problem," offers recommendations for clinicians treating pregnant and breastfeeding mothers.

"Pregnant and breastfeeding women are particularly vulnerable to iodine deficiency. These women should make sure that they take a prenatal or lactation supplement that contains adequate amounts of iodine," Rogan said. Pregnant and lactating women need about 290 micrograms of iodine a day. Iodized table salt can provide some of this, but most also need supplements containing at least 150 micrograms of iodine. Rogan pointed out that most processed foods are prepared with noniodized salt, so they do not help women meet the required iodine guidelines.

Although most pregnant and lactating women do take supplements, only about 15-20 percent take supplements containing iodine, according to the policy statement.

The statement also includes recommendations to federal, state, and local government agencies regarding iodine supplement labeling, and the need for safe drinking water and tobacco-free environments for children. Chemicals like nitrate, found in contaminated well water, and thiocyanate from cigarette smoke, can decrease iodine concentration. These chemicals are also difficult for infants to metabolize.

Iodine deficiency

Iodine deficiency can cause thyroid problems, which may affect a child's cognitive development. Severe, untreated hypothyroidism in infancy can have serious, permanent effects on the brain.

Additionally, iodine deficiency in a mother can increase the vulnerability of both the mother and the child to the effects of certain environmental pollutants, including nitrate, thiocyanate, and perchlorate. Perchlorate is a chemical found naturally in arid climates and is used in the manufacture of solid rocket propellant for munitions, flares, and fireworks. It can contaminate drinking water and has been shown to disturb the normal production of thyroid hormones.

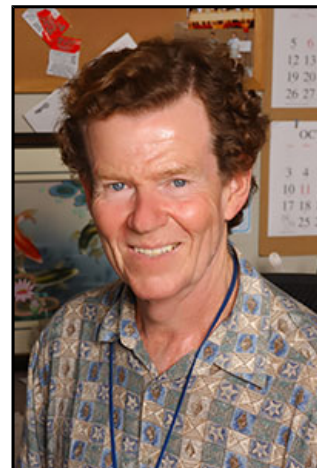
Council on Environmental Health

The AAP [Council on Environmental Health](http://www.aap.org/en-us/about-the-aap/Committees-Councils-Sections/Council-on-Environmental-Health/Pages/default.aspx), (<http://www.aap.org/en-us/about-the-aap/Committees-Councils-Sections/Council-on-Environmental-Health/Pages/default.aspx>)

chaired by Jerome Paulson, M.D., of George Washington University, developed the policy statement. NIEHS Senior Advisor for Public Health John Balbus, M.D., now serves as the NIEHS liaison to the council, a role previously filled by Rogan.

The council advises the AAP board of directors, supports legislative initiatives, composes policy documents, and leads educational initiatives pertaining to environmental health and toxic exposures.

(Robin Mackar is the news director in the NIEHS Office of Communications and Public Liaison, and a frequent contributor to the Environmental Factor.)



In 2012, Rogan was named an honorary fellow by AAP for his exemplary service with the group's Council on Environmental Health (see [story](#)). (Photo courtesy of Steve McCaw)

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